

ATTORNEY'S-DOCKET NO.  
TH1276 (US)

# DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled SYNTHESIS OF ALIPHATIC 1,3-DIOLS UTILIZING REDUCED LIGAND CONCENTRATION AND WATER EXTRACTION the specification of which is attached hereto unless the following box is checked:

☐

was filed on \_\_\_\_\_ as United States Application Number or PCT International Application Number \_\_\_\_\_ and was amended on \_\_\_\_\_ ( if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 27 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

## PRIOR FOREIGN APPLICATION(S)

Priority  
Not Claimed

|                    |         |                      |
|--------------------|---------|----------------------|
| APPLICATION NUMBER | COUNTRY | DAY/MONTH/YEAR FILED |
| APPLICATION NUMBER | COUNTRY | DAY/MONTH/YEAR FILED |

☐  
☐

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

|   |   |
|---|---|
| APPLICATION SERIAL NO.<br><b>60/356,601</b> | FILING DATE<br><b>February 13, 2002</b> |
| APPLICATION SERIAL NO.                      | FILING DATE                             |

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or § 365(c) of any PCT International application designating the United States, listed below and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

|                        |             |                                     |
|------------------------|-------------|-------------------------------------|
| APPLICATION SERIAL NO. | FILING DATE | STATUS-PATENTED, PENDING, ABANDONED |
| APPLICATION SERIAL NO. | FILING DATE | STATUS-PATENTED, PENDING, ABANDONED |

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

|                           |                            |                               |                                  |
|---------------------------|----------------------------|-------------------------------|----------------------------------|
| NAME<br>Donald F. Haas    | ATTORNEY/AGENT<br>Attorney | REGISTRATION NUMBER<br>26,177 | TELEPHONE NUMBER<br>713-241-3356 |
| NAME<br>Richard F. Lemuth | ATTORNEY/AGENT<br>Attorney | REGISTRATION NUMBER<br>30,081 | TELEPHONE NUMBER<br>713-241-3716 |

Revised June 1995

## SEND CORRESPONDENCE TO:

(NAME) **Donald F. Haas**  
c/o Shell Oil Company  
Intellectual Property  
P.O. Box 2463  
Houston, TX 77252-2463

ATTORNEY'S DOCKET NO.  
TH1276 (US)

# DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

|   |                                     |
|---|-------------------------------------|
| FULL NAME OF SOLE OR FIRST INVENTOR (given name, family name)<br><b>Joseph Broun Powell</b> |                                     |
| INVENTOR'S SIGNATURE<br><i>Joseph Broun Powell</i>  | DATE SIGNED<br><b>1/13/03</b>       |
| RESIDENCE<br><b>10506 Normont Drive, Houston, Texas 77070</b>                               | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>10506 Normont Drive, Houston, Texas 77070</b>                     |                                     |

|  |                                     |
|--|-------------------------------------|
| FULL NAME OF SECOND JOINT INVENTOR, IF ANY (given name, family name)<br><b>Paul Richard Weider</b> |                                     |
| SECOND INVENTOR'S SIGNATURE<br><i>Paul Richard Weider</i>  | DATE SIGNED<br><b>1/16/03</b>       |
| RESIDENCE<br><b>15014 Tramore, Houston, Texas 77083</b>  | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>15014 Tramore, Houston, Texas 77083</b>                                  |                                     |

|  |                                     |
|--|-------------------------------------|
| FULL NAME OF THIRD JOINT INVENTOR, IF ANY (given name, family name)<br><b>John Frederick Knifton</b> |                                     |
| THIRD INVENTOR'S SIGNATURE<br><i>John Frederick Knifton</i>  | DATE SIGNED<br><b>1/27/03</b>       |
| RESIDENCE<br><b>14855 Memorial Drive Apt. 2501, Houston, Texas 77079</b>                             | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>14855 Memorial Drive Apt. 2501, Houston, Texas 77079</b>                   |                                     |

|   |                                     |
|---|-------------------------------------|
| FULL NAME OF FOURTH JOINT INVENTOR, IF ANY (given name, family name)<br><b>Kevin Dale Allen</b> |                                     |
| FOURTH INVENTOR'S SIGNATURE<br><i>Kevin Dale Allen</i>  | DATE SIGNED<br><b>1/23/03</b>       |
| RESIDENCE<br><b>37225 South Lakeshore Avenue, Prairieville, Louisiana 70769</b>                 | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>37225 South Lakeshore Avenue, Prairieville, Louisiana 70769</b>       |                                     |

|   |                                     |
|---|-------------------------------------|
| FULL NAME OF FIFTH JOINT INVENTOR, IF ANY (given name, family name)<br><b>Lynn Henry Slauch</b>                                       |                                     |
| FIFTH INVENTOR'S SIGNATURE<br><i>Lynn Henry Slauch</i>  | DATE SIGNED<br><b>1/28/03</b>       |
| RESIDENCE<br><b>13415 COPELAND OAKS BLVD., CYPRESS, TEXAS 77429</b><br><b>41911 Cypresswood Drive, Houston, Texas 77070</b>           | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>13415 COPELAND OAKS BLVD., CYPRESS, TEXAS 77429</b><br><b>41911 Cypresswood Drive, Houston, Texas 77070</b> |                                     |

# DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

ATTORNEY'S DOCKET NO.  
TH1276 (US)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

|   |                               |
|---|-------------------------------|
| FULL NAME OF SOLE OR FIRST INVENTOR (given name, family name)<br><b>Juan Pedro Arhancet</b> |                               |
| INVENTOR'S SIGNATURE  | DATE SIGNED                   |
| RESIDENCE<br><b>20667 Castle Bend Drive, Katy, Texas 77469</b>                              | CITIZENSHIP<br><b>Uruguay</b> |
| POST OFFICE ADDRESS<br><b>20667 Castle Bend Drive, Katy, Texas 77469</b>                    |                               |

|  |             |
|--|-------------|
| FULL NAME OF SECOND JOINT INVENTOR, IF ANY (given name, family name) |             |
| SECOND INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE  | CITIZENSHIP |
| POST OFFICE ADDRESS  |             |

|   |             |
|---|-------------|
| FULL NAME OF THIRD JOINT INVENTOR, IF ANY (given name, family name) |             |
| THIRD INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE   | CITIZENSHIP |
| POST OFFICE ADDRESS   |             |

|  |             |
|--|-------------|
| FULL NAME OF FOURTH JOINT INVENTOR, IF ANY (given name, family name) |             |
| FOURTH INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE  | CITIZENSHIP |
| POST OFFICE ADDRESS  |             |

|   |             |
|---|-------------|
| FULL NAME OF FIFTH JOINT INVENTOR, IF ANY (given name, family name) |             |
| FIFTH INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE   | CITIZENSHIP |
| POST OFFICE ADDRESS   |             |

# DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

ATTORNEY'S DOCKET NO.  
TH1276 (US)

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled SYNTHESIS OF ALIPHATIC 1,3-DIOLS UTILIZING REDUCED LIGAND CONCENTRATION AND WATER EXTRACTION the specification of which is attached hereto unless the following box is checked:

☐ was filed on \_\_\_\_\_ as United States Application Number or PCT International Application Number \_\_\_\_\_ and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 27 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

## PRIOR FOREIGN APPLICATION(S)

| APPLICATION NUMBER | COUNTRY | DAY/MONTH/YEAR FILED |
|--------------------|---------|----------------------|
| APPLICATION NUMBER | COUNTRY | DAY/MONTH/YEAR FILED |

Priority  
Not Claimed

☐
☐

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below.

|                                      |                                  |
|--------------------------------------|----------------------------------|
| APPLICATION SERIAL NO.<br>60/356,601 | FILING DATE<br>February 13, 2002 |
| APPLICATION SERIAL NO.               | FILING DATE                      |

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s) or § 365(c) of any PCT International application designating the United States, listed below and insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

|                        |             |                                     |
|------------------------|-------------|-------------------------------------|
| APPLICATION SERIAL NO. | FILING DATE | STATUS-PATENTED, PENDING, ABANDONED |
| APPLICATION SERIAL NO. | FILING DATE | STATUS-PATENTED, PENDING, ABANDONED |

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

| NAME              | ATTORNEY/AGENT | REGISTRATION NUMBER | TELEPHONE NUMBER |
|-------------------|----------------|---------------------|------------------|
| Donald F. Haas    | Attorney       | 26,177              | 713-241-3356     |
| NAME              | ATTORNEY/AGENT | REGISTRATION NUMBER | TELEPHONE NUMBER |
| Richard F. Lemuth | Attorney       | 30,081              | 713-241-3716     |

Revised June 1995

## SEND CORRESPONDENCE TO:

(NAME) Donald F. Haas  
c/o Shell Oil Company  
Intellectual Property  
P.O. Box 2463  
Houston, TX 77252-2463

# DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

|   |                                     |
|---|-------------------------------------|
| FULL NAME OF SOLE OR FIRST INVENTOR (given name, family name)<br><b>Joseph Broun Powell</b> |                                     |
| INVENTOR'S SIGNATURE  | DATE SIGNED                         |
| RESIDENCE<br><b>10506 Normont Drive, Houston, Texas 77070</b>                               | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>10506 Normont Drive, Houston, Texas 77070</b>                     |                                     |

|  |                                     |
|--|-------------------------------------|
| FULL NAME OF SECOND JOINT INVENTOR, IF ANY (given name, family name)<br><b>Paul Richard Weider</b> |                                     |
| SECOND INVENTOR'S SIGNATURE  | DATE SIGNED                         |
| RESIDENCE<br><b>15014 Tramore, Houston, Texas 77083</b>  | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>15014 Tramore, Houston, Texas 77083</b>                                  |                                     |

|  |                                     |
|--|-------------------------------------|
| FULL NAME OF THIRD JOINT INVENTOR, IF ANY (given name, family name)<br><b>John Frederick Knifton</b> |                                     |
| THIRD INVENTOR'S SIGNATURE   | DATE SIGNED                         |
| RESIDENCE<br><b>14855 Memorial Drive Apt. 2501, Houston, Texas 77079</b>                             | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>14855 Memorial Drive Apt. 2501, Houston, Texas 77079</b>                   |                                     |


|   |                                     |
|---|-------------------------------------|
| FULL NAME OF FOURTH JOINT INVENTOR, IF ANY (given name, family name)<br><b>Kevin Dale Allen</b> |                                     |
| FOURTH INVENTOR'S SIGNATURE   | DATE SIGNED                         |
| RESIDENCE<br><b>37225 South Lakeshore Avenue, Prairieville, Louisiana 70769</b>                 | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>37225 South Lakeshore Avenue, Prairieville, Louisiana 70769</b>       |                                     |

|   |                                     |
|---|-------------------------------------|
| FULL NAME OF FIFTH JOINT INVENTOR, IF ANY (given name, family name)<br><b>Lynn Henry Slauch</b> |                                     |
| FIFTH INVENTOR'S SIGNATURE  | DATE SIGNED                         |
| RESIDENCE<br><b>11911 Cypresswood Drive, Houston, Texas 77070</b>                               | CITIZENSHIP<br><b>United States</b> |
| POST OFFICE ADDRESS<br><b>11911 Cypresswood Drive, Houston, Texas 77070</b>                     |                                     |

# DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

ATTORNEY'S DOCKET NO.  
TH1276 (US)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

|   |                |
|---|----------------|
| FULL NAME OF SOLE OR FIRST INVENTOR (given name, family name)   |                |
| <b>Juan Pedro Arhancet</b>  | 1/31/03        |
| INVENTOR'S SIGNATURE<br> | DATE SIGNED    |
| RESIDENCE   | CITIZENSHIP    |
| <b>4 Country Fair Lane, Creve Coeur, Missouri 63141</b>   | <b>Uruguay</b> |
| POST OFFICE ADDRESS   | UNITED STATES  |
| <b>4 Country Fair Lane, Creve Coeur, Missouri 63141</b>   |                |

|  |             |
|--|-------------|
| FULL NAME OF SECOND JOINT INVENTOR, IF ANY (given name, family name) |             |
| SECOND INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE  | CITIZENSHIP |
| POST OFFICE ADDRESS  |             |

|   |             |
|---|-------------|
| FULL NAME OF THIRD JOINT INVENTOR, IF ANY (given name, family name) |             |
| THIRD INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE   | CITIZENSHIP |
| POST OFFICE ADDRESS   |             |

|  |             |
|--|-------------|
| FULL NAME OF FOURTH JOINT INVENTOR, IF ANY (given name, family name) |             |
| FOURTH INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE  | CITIZENSHIP |
| POST OFFICE ADDRESS  |             |

|   |             |
|---|-------------|
| FULL NAME OF FIFTH JOINT INVENTOR, IF ANY (given name, family name) |             |
| FIFTH INVENTOR'S SIGNATURE  | DATE SIGNED |
| RESIDENCE   | CITIZENSHIP |
| POST OFFICE ADDRESS   |             |